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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,374	03/19/2004	Hang-Dony Kuan	TI-36952	7211

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EXAMINER	
VAZQUEZ, ARLEEN M	

ART UNIT	PAPER NUMBER
2829	

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/804,374	KUAN ET AL.	
	Examiner	Art Unit	
	Arleen M. Vazquez	2829	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) *1-5,9,15 and 16* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *6-8 and 12-14* is/are rejected.

7)☒ Claim(s) *10 and 11* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *19 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date: _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Arguments of the **Appeal Brief** filed on August 28, 2006 are considered ***persuasive***.

2. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

Claim Objections

3. Claims 10-11 are objected to because of the following informalities:

Claims 10 and 11 are not going to be given patentably weight because they recite method steps such as "drilled" and "etched" in an apparatus claim. See MPEP 2113, Product-by-Process Claims.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 6-8 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by ***Hembree (US 6,400,169)***.

As to claim 6, ***Hembree*** discloses in Figures 7A and 7B a system (90) for testing a singulated semiconductor device (10) comprising a socket (92) for receiving a DUT (10), the socket having pins (96) with ends (108) for making electrical contact with the DUT (10) and opposing ends (104) for making contact with a test board (98), the test board (98) adjoining the socket (92), the test board (98) having pin receptacles (106) for receiving the opposing ends (104) of the pins (96); and measuring means (100) operably coupled to the test board pins receptacles (106) for measuring electrical signals in the DUT(10).

As to claims 7 and 8, ***Hembree*** discloses in Figures 7A and 7B the receptacles (106) are generally conical basin for receiving the pin (96 and 104).

As to claim 12, ***Hembree*** discloses in Figures 7A and 7B a test board (98) for use in association with semiconductor device automatic test equipment (90) and a socket (92), the socket having pins (96) and adapted for receiving a device under test (10), the test board comprising a contact area (area where receptacles 106 are situated) for operably coupling a pin (96 and 104) to the ATE (90); a pin receptacle (106) on the contact area for receiving a pin (96 and 104), for thereby making staunch electrical contact between the pin (96 and 104) and contact point (middle part of receptacle 106).

As to claims 13 and 14, ***Hembree*** discloses in Figures 7A and 7B the receptacles (106) are generally conical basin for receiving the pin (96 and 104).

6. Claims 6-8 and 12-14 are rejected under 35 U.S.C. 102(b) as being anticipated by ***Frederickson et al. (US 5,955,888).***

As to claim 6, ***Frederickson et al.*** discloses in Figures 6A, 6B and 7A a system (600) for testing a singulated semiconductor device (100) comprising a socket (650,646,640,670) for receiving a DUT (100), the socket having pins (620) with ends (624,626) for making electrical contact with the DUT (100) and opposing ends (622) for making contact with a test board (610), the test board (610) adjoining the socket (650,646,640,670), the test board (610) having pin receptacles (618) for receiving the opposing ends (622) of the pins (620); and measuring means (616, Col. 5 lns 53-60) operably coupled to the test board pins receptacles (618) for measuring electrical signals in the DUT(100).

As to claims 7 and 8, ***Hembree*** discloses in Figures 6A, 6B and 7A the receptacles (618) are generally conical basin for receiving the pin (620 and 622).

As to claim 12, ***Hembree*** discloses in Figures 6A, 6B and 7A a test board (610) for use in association with semiconductor device automatic test equipment (616, Col. 5 lns 53-60) and a socket (650,646,640,670), the socket having pins (620) and adapted for receiving a device under test (100), the test board (610) comprising a contact area (area where receptacles 618 are situated) for operably coupling a pin (620 and 622) to the ATE (616, Col. 5 lns 53-60); a pin receptacle (618) on the contact area for receiving a pin (620 and 622), for thereby making staunch electrical contact between the pin (620 and 622) and contact point (middle part of receptacle 618).

As to claims 13 and 14, ***Hembree*** discloses in Figures 6A, 6B and 7A the receptacles (618) are generally conical basin for receiving the pin (620 and 622).

7. Claims 6 is rejected under 35 U.S.C. 102(b) as being anticipated by ***Bardsley et al. (US 6,094,056).***

As to claim 6, ***Bardsley et al.*** discloses in Figures 8 and 9 a system for testing a singulated semiconductor device (124) comprising a socket (134) for receiving a DUT (124), the socket having pins (136) with ends (137) for making electrical contact with the DUT (124) and opposing ends (ends of 136 facing board 132) for making contact with a test board (132), the test board (132) adjoining the socket (134), the test board (132) having pin receptacles (where 136 make contact with board 132) for receiving the opposing ends of the pins (136); and measuring means (130) operably coupled to the test board pins receptacles for measuring electrical signals in the DUT(124).

8. Claims 6 is rejected under 35 U.S.C. 102(b) as being anticipated by ***Motooka et al. (US 5,831,441).***

As to claim 6, ***Motooka et al.*** discloses in Figures 6 and 7 a system for testing a singulated semiconductor device (22) comprising a socket (20) for receiving a DUT (22), the socket having pins (25) with ends (24) for making electrical contact with the DUT (22) and opposing ends (ends of 25 facing board 21) for making contact with a test board (21), the test board (21) adjoining the socket (20), the test board (21) having pin receptacles (where 25 make contact with board 21) for receiving the opposing ends of

the pins (25); and measuring means (Col.15 lns 28-38) operably coupled to the test board pins receptacles for measuring electrical signals in the DUT(22).

Response to Arguments

9. Applicant's arguments with respect to claims 6-8,10 and 11 have been considered but are moot in view of the new ground(s) of rejection.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hembree (US 6,397,460) discloses an "Electrical Connector".

Hilton (US 6,069,482) discloses a "Ball grid array package emulator".

Cowart et al. (US 5,519,331) discloses a "Removable biasing board for automated testing of integrated circuits".

Haseyama et al. (US 6,535,002) discloses an "IC socket, a test method using the same and an IC socket mounting mechanism".

Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Arleen M. Vazquez whose telephone number is 571-272-2619. The examiner can normally be reached on Monday to Friday, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ha Nguyen can be reached on 571-272-1678. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AMV

JERMELE HOLLINGTON
PRIMARY EXAMINER
AU 2829
11/27/06